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## METHOD AND APPARATUS FOR SWITCHING AND MODULATING AN OPTICAL SIGNAL

ABSTRACT

A switching device includes an optical cavity and a phase modulator disposed within the optical cavity. An optical signal is propagated into the cavity. The phase modulator can selectively introduce a phase shift between portions of the optical signals, which are then recombined and propagated out of the optical cavity. The optical cavity confines the optical signal to allow phase shifts to accumulate so that a relatively small drive power to the phase modulator can be used to achieve a relatively large phase shift.

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